

77
SEQUENCE LISTING

<110> Levy, Andrew P.

<120> NOVEL ANTIOXIDANT, NUCLEIC ACID CONSTRUCTS ENCODING SAME,
PHARMACEUTICAL COMPOSITIONS CONTAINING SAME AND USE OF SAME FOR REDUCING
OXIDATIVE-STRESS

<130> 01/22194

<160> 20

<170> PatentIn version 3.1

<210> 1

<211> 33

<212> DNA

<213> Artificial sequence

<220>

<223> synthetic oligonucleotide

<400> 1

cgcggatcca tcctgggtgg acacctggat gcc

33

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<211> 36

<212> DNA

<213> Artificial sequence

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<223> synthetic oligonucleotide

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gcggaattct tagttctcag ctatggtctt ctgaac

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<211> 36

<212> DNA

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099043-07101

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36

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33

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<211> 33

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<400> 6

09903453-01101

33

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gcggaattct tatgcttcac attcaggaag ttt

33

<210> 9

<211> 738

<212> DNA

<213> Homo sapiens

<400> 9

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caccataatc tcaccacagg tgccacgctg atcaatgaac aatggctgct gaccacggct 120

aaaaatctct tcctgaacca ttcagaaaat gcaacagcga aagacattgc ccctacttta 180

acactctatg tggggaaaaa gcagcttgta gagattgaga aggttgttct acaccctaac 240

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<212> DNA

<400> 10

<210> 11

<212> DNA

<400> 11

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ctgcctgtgg ctgaccaaga ccaatgcata aggcattatg aaggcagcac agtccccgaa 120
aagaag 126

<210> 12

<211> 63

<212> DNA

<213> Homo sapiens

<400> 12

gtttctgggt gggggcgaaa tgccaatttt aaatttactg accatctgaa gtatgtcatg 60

ctg 63

<210> 13

<211> 387

<212> DNA

<213> Homo sapiens

<400> 13

gtagactcag gcaatgatgt cacggatatc gcagatgacg gctgcccga gccccccgag 60

attgcacatg gctatgtgga gcaactcggtt cgctaccagt gtaagaacta ctacaaactg 120

cgcacagaag gagatggagt atacacctta aatgataaga agcagtggat aaataaggct 180

gttgagata aacttcctga atgtgaagca gatgacggct gcccgagcc ccccgagatt 240

gcacatggct atgtggagca ctcggttcgc taccagtgtg agaactacta caaactgcgc 300

acagaaggag atggagtgtg caccttaaac aatgagaagc agtggataaa taaggctgtt 360

ggagataaac ttctgaatg tgaagca 387

<210> 14

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<213> Homo sapiens

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attgcacatg gctatgtgga gcaactcggtt cgctaccagt gtaagaacta ctacaaactg 120

F01F20" E94E0650

cgcacagaag gagatggagt atacacctta aatgataaga agcagtggat aaataaggct 180
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<210> 15

<211> 245

<212> PRT

<213> Homo sapiens

<400> 15

Ile Leu Gly Gly His Leu Asp Ala Lys Gly Ser Phe Pro Trp Gln Ala
 1 5 10 15

Arg Met Val Ser His His Asn Leu Thr Thr Gly Ala Thr Leu Ile Asn
 20 25 30

Glu Gln Trp Leu Leu Thr Thr Ala Lys Met Leu Phe Leu Asn His Ser
 35 40 45

Glu Asn Ala Thr Ala Lys Asp Ile Ala Pro Thr Leu Thr Leu Tyr Val
 50 55 60

Gly Lys Lys Gln Leu Val Glu Ile Glu Lys Val Val Leu His Pro Asn
 65 70 75 80

Tyr Ser Gln Val Asp Ile Gly Leu Ile Lys Leu Lys Gln Lys Val Ser
 85 90 95

Val Asn Glu Arg Val Met Pro Ile Cys Leu Pro Ser Lys Asp Tyr Ala
 100 105 110

Glu Val Gly Arg Val Gly Tyr Val Ser Gly Trp Gly Arg Asn Ala Asn
 115 120 125

Phe Lys Phe Thr Asp His Leu Lys Tyr Val Met Leu Pro Val Ala Asp
 130 135 140

Gln Asp Gln Cys Ile Arg His Tyr Glu Gly Ser Thr Val Pro Glu Lys
 145 150 155 160

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Lys Thr Pro Lys Ser Pro Val Gly Val Gln Pro Ile Leu Asn Glu His
 165 170 175

Thr Phe Cys Ala Gly Met Ser Lys Tyr Gln Glu Asp Thr Cys Tyr Gly
 180 185 190

Asp Ala Gly Ser Ala Phe Ala Val His Asp Leu Glu Glu Asn Ile Trp
 195 200 205

Tyr Ala Thr Gly Ile Leu Ser Phe Asp Lys Ser Cys Ala Val Ala Glu
 210 215 220

Tyr Gly Val Tyr Val Lys Val Thr Ser Ile Gln Asp Trp Val Gln Lys
 225 230 235 240

Thr Ile Ala Glu Asn
 245

<210> 16

<211> 82

<212> PRT

<213> Homo sapiens

<400> 16

Asn Tyr Ser Gln Val Asp Ile Gly Leu Ile Lys Leu Lys Gln Lys Val
 1 5 10 15

Ser Val Asn Glu Arg Val Met Pro Ile Cys Leu Pro Ser Lys Asp Tyr
 20 25 30

Ala Glu Val Gly Arg Val Gly Tyr Val Ser Gly Trp Gly Arg Asn Ala
 35 40 45

Asn Phe Lys Phe Thr Asp His Leu Lys Tyr Val Met Leu Pro Val Ala
 50 55 60

Asp Gln Asp Gln Cys Ile Arg His Tyr Glu Gly Ser Thr Val Pro Glu
 65 70 75 80

Lys Lys

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<211> 42

<212> PRT

<213> Homo sapiens

<400> 17

Val Ser Gly Trp Gly Arg Asn Ala Asn Phe Lys Phe Thr Asp His Leu
1 5 10 15

Lys Tyr Val Met Leu Pro Val Ala Asp Gln Asp Gln Cys Ile Arg His
20 25 30

Tyr Glu Gly Ser Thr Val Pro Glu Lys Lys
35 40

<210> 18

<211> 21

<212> PRT

<213> Homo sapiens

<400> 18

Val	Ser	Gly	Trp	Gly	Arg	Asn	Ala	Asn	Phe	Lys	Phe	Thr	Asp	His	Leu
1				5					10					15	

Lys Tyr Val Met Leu
20

<210> 19

<211> 129

<212> PRT

<213> Homo sapiens

<400> 19

Val Asp Ser Gly Asn Asp Val Thr Asp Ile Ala Asp Asp Gly Cys Pro
 1 5 10 15

Lys Pro Pro Arg Ile Ala His Gly Tyr Val Glu His Ser Val Arg Tyr
 20 25 30

Gln Cys Lys Asn Tyr Tyr Lys Leu Arg Thr Glu Gly Asp Gly Val Tyr
 35 40 45

Thr Leu Asn Asp Lys Lys Gln Trp Ile Asn Lys Ala Val Gly Asp Lys
 50 55 60

Leu Pro Glu Cys Glu Ala Asp Asp Gly Cys Pro Lys Pro Pro Glu Ile
 65 70 75 80

Ala His Gly Tyr Val Glu His Ser Val Arg Tyr Gln Cys Lys Asn Tyr
 85 90 95

Tyr Lys Leu Arg Thr Glu Gly Asp Gly Val Tyr Thr Leu Asn Asn Glu
 100 105 110

Lys Gln Trp Ile Asn Lys Ala Val Gly Asp Lys Leu Pro Glu Cys Glu
 115 120 125

Ala

<210> 20

<211> 70

<212> PRT

<213> Homo sapiens

<400> 20

Val Asp Ser Gly Asn Asp Val Thr Asp Ile Ala Asp Asp Gly Cys Pro
 1 5 10 15

Lys Pro Pro Arg Ile Ala His Gly Tyr Val Glu His Ser Val Arg Tyr
 20 25 30

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Gln Cys Lys Asn Tyr Tyr Lys Leu Arg Thr Glu Gly Asp Gly Val Tyr
35 40 45

Thr Leu Asn Asp Lys Lys Gln Trp Ile Asn Lys Ala Val Gly Asp Lys
50 55 60

Leu Pro Glu Cys Glu Ala
65 70

Table 1	
Variable	Value
Age (years)	25.0
Sex (male/female)	10/10
Height (cm)	170.0
Weight (kg)	70.0
Body mass index (kg/m ²)	23.7
Heart rate (b/min)	75.0
Stroke volume (L)	0.07
Cardiac output (L/min)	5.25
Systemic vascular resistance (mmHg/L/min)	18.0
Pulmonary vascular resistance (mmHg/L/min)	1.5
Mean arterial pressure (mmHg)	93.3
Diastolic blood pressure (mmHg)	60.0
Systolic blood pressure (mmHg)	133.3
Left ventricular end-diastolic volume (L)	0.14
Left ventricular stroke volume (L)	0.07
Left ventricular ejection fraction (%)	50.0
Right ventricular end-diastolic volume (L)	0.14
Right ventricular stroke volume (L)	0.07
Right ventricular ejection fraction (%)	50.0
Left atrial end-diastolic volume (L)	0.05
Left atrial stroke volume (L)	0.05
Left atrial ejection fraction (%)	100.0
Right atrial end-diastolic volume (L)	0.05
Right atrial stroke volume (L)	0.05
Right atrial ejection fraction (%)	100.0
Left ventricular end-systolic volume (L)	0.07
Left ventricular stroke volume (L)	0.07
Left ventricular ejection fraction (%)	50.0
Right ventricular end-systolic volume (L)	0.07
Right ventricular stroke volume (L)	0.07
Right ventricular ejection fraction (%)	50.0
Left atrial end-systolic volume (L)	0.00
Left atrial stroke volume (L)	0.05
Left atrial ejection fraction (%)	100.0
Right atrial end-systolic volume (L)	0.00
Right atrial stroke volume (L)	0.05
Right atrial ejection fraction (%)	100.0
Left ventricular end-diastolic pressure (mmHg)	12.0
Left ventricular end-systolic pressure (mmHg)	110.0
Left ventricular stroke work (J)	1.0
Right ventricular end-diastolic pressure (mmHg)	12.0
Right ventricular end-systolic pressure (mmHg)	110.0
Right ventricular stroke work (J)	1.0
Left atrial end-diastolic pressure (mmHg)	12.0
Left atrial end-systolic pressure (mmHg)	110.0
Left atrial stroke work (J)	1.0
Right atrial end-diastolic pressure (mmHg)	12.0
Right atrial end-systolic pressure (mmHg)	110.0
Right atrial stroke work (J)	1.0
Left ventricular end-diastolic pressure (mmHg)	12.0
Left ventricular end-systolic pressure (mmHg)	110.0
Left ventricular stroke work (J)	1.0
Right ventricular end-diastolic pressure (mmHg)	12.0
Right ventricular end-systolic pressure (mmHg)	110.0
Right ventricular stroke work (J)	1.0
Left atrial end-diastolic pressure (mmHg)	12.0
Left atrial end-systolic pressure (mmHg)	110.0
Left atrial stroke work (J)	1.0
Right atrial end-diastolic pressure (mmHg)	12.0
Right atrial end-systolic pressure (mmHg)	110.0
Right atrial stroke work (J)	1.0